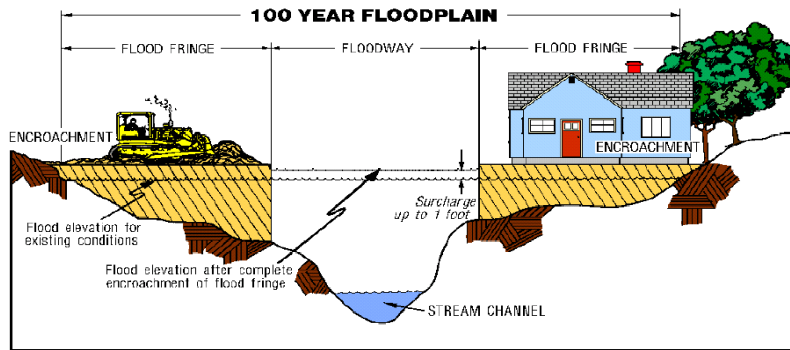


Floodplain Management: Current Floodplain Standards



Description

Mapped Floodplains:

Current floodplain standards apply to FEMA - mapped floodplains and allow for a one foot rise in the floodplain elevation. This is accomplished by allowing fill in the flood fringe area and keeping the floodway open for conveyance of flood water. However, the models used to develop the current standard do not account for the loss of overbank storage or upstream development, which can raise the base flood elevation significantly higher than one foot.

Unmapped Floodplains

City of Lincoln and Lancaster County floodplain standards currently apply only to streams that are large enough to have a FEMA-mapped floodplain. The Minimum Flood Corridor requirement that is part of the stormwater standards apply to some stream reaches outside the mapped floodplain. (Note: see Greenfield Approach fact sheet for information regarding the minimum corridor).

Advantages

- ★ No modifications to current floodplain regulations or City procedures are required.
- ★ There would be no increased up front cost for development in the floodplain.
- ★ There would be no increased up front cost for public infrastructure in the floodplain.

Floodplain Management: Current Floodplain Standards

Disadvantages

- ⊖ The City could expect significant increases in flood hazards and economic loss caused by loss of flood storage:

Floodplain Reach/Flood Height	# Structures Flooded	Damage in Millions of Dollars*
COE Dead Man's Run Study (33rd to 56th St):		
Existing FEMA-mapped floodplain:	605	\$31.9
Future floodplain assuming 1' rise:	756	\$42.8
<i>Predicted actual rise with 100% loss storage: 2.8 feet</i>	?	?
COE Beal Slough Study (Salt Creek to 40th St):		
Existing FEMA-mapped floodplain:	74	\$2.2
Future floodplain assuming 1' rise:	107	\$4.1
<i>Predicted actual rise with 100% loss storage: 4.33 feet</i>	?	?

Note: Additional costs are identified in the CDM report.

- ⊖ Long term costs would increase, since reactive flooding solutions in mitigation are more costly than proactive up-front solutions (e.g. \$15M for mitigation in Beal Slough).
- ⊖ Reduced opportunities for greenway corridors..
- ⊖ The loss of natural floodplain functions will continue to cause stream degradation and bank de-stabilization, loss of riparian and aquatic habitat, and reduction in water quality.

Implementation Considerations

- Requires no implementation considerations as this is the current policy.

References

- February 5, 2002 handout of existing floodplain regulations
- February 5, 2002 handout of History of Flooding
- April 16, 2002 handout of Flood Insurance Study
- August 20, 2002 US Army Corps of Engineers study on Dead Man's Run
- September 24, 2002 US Army Corps of Engineers presentation on Beal Slough
- September 24, 2002 Floodplain Studies Progress Overview from Public Works
- October 22, 2002 CDM presentation of Dead Man's Run
- November 5, 2002 CDM presentation of Fact Sheets

